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CLAIMS:

1. A network system connected to an in-house network and capable of controlling the transmission, comprising a transmission/receiving terminal having means for transmitting/receiving data and repeater means for relaying the data transmitted/received between said transmission/receiving terminal and said in-house network:

wherein said data includes information proper and additional information associated with said information proper; and

said repeater means includes means for controlling the data transmission from said transmission/receiving terminal using said additional information, and means for removing said additional information from said data transmissible outside of said in-house network.

2. A network system capable of controlling the transmission according to claim 1,

wherein said additional information includes information representing the attribute of said information proper; and

wherein said repeater means includes means for holding the transmission policy corresponding to said attribute, and means for determining whether the data to be transmitted by said transmission terminal can be transmitted in accordance with said transmission policy.

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3. A network system capable of controlling the transmission according to claim 2,

wherein said attribute is a security level.

4. A network system capable of controlling the transmission according to claim 3,

wherein said additional information further includes settlor information for said security level and hierarchical information of said settlor.

5. A network system capable of controlling the transmission according to claim 4,

wherein said transmission/receiving terminal includes means for controlling the access to said information proper using said additional information, and means for delivering said information proper of said data to an application program operating at said transmission/receiving terminal.

6. A network system capable of controlling the transmission according to claim 4, further comprising means for changing said additional information.

7. A network system capable of controlling the transmission according to claim 6,

wherein said access control means includes means for setting the security level of said application program, and means for determining whether said application program can access said data or not, by comparing the security level of said application program with the security level of said data proper, in response to a data access request of said application

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program, and

said means for setting the security level of said application program sets the security level of said application program in accordance with the security level of said data proper before said application program starts processing said data.

8. A network system capable of controlling the transmission according to claim 1, wherein said repeater means includes:

a transmission permit list of transmittees external to said in-house network to which said transmission/receiving terminal is permitted to transmit data;

means for encrypting the data to be transmitted by said transmission/receiving terminal;

means for receiving the data to be transmitted by said transmission/receiving terminal;

means for determining whether said data is to be transmitted, with reference to said transmission permit list;

means for encrypting said data of which the transmission is permitted; and

means for transmitting said encrypted data outside of said in-house network.

9. A network system capable of controlling the transmission according to claim 1, wherein said repeater means includes:

means for receiving the information trans-

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mitted toward said transmission/receiving terminal from a source external to said in-house network;

means for mounting the additional information on said information proper and generating said data; and

means for transmitting said data to said transmission/receiving terminal.

10. A network system capable of controlling the transmission according to claim 1,

wherein said transmission/receiving terminal includes a list of additional information for recording the additional information to be added to each of said information proper, and means for adding said additional information to said information proper at the time of transmitting the data and at the time of writing the data in removable media and generating the data.

11. A network system capable of controlling the transmission according to claim 1,

wherein said additional information includes information representing the security level of said information proper, a feature value of said information proper, a first digital signature for the information indicating said security level and said feature value, and a second digital value for the information indicating said security level and said information proper.

12. A network system capable of controlling the transmission according to claim 1,

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wherein said transmission/receiving terminal includes a first operating system, a second operating system and a multi OS control program, said program controlling said first and second operating systems, said first operating system manages the application program handling said information proper, and

said second operating system manages the means for controlling the access to said information proper using said additional information, and means for changing said additional information.

13. A network system capable of controlling the transmission, comprising:

an information processing system including a first storage unit, a second storage unit for reading/writing data from and into removable media, means for accessing said first and second storage units, and an additional information list containing the additional information to be added to each of said information proper; and

a key management unit for managing an encryption key;

wherein said access means includes means for recording the information proper from said first storage unit into said second storage unit; and

said recording means includes means for determining whether said data is to be encrypted or not, by referring to the additional information of said

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information proper recorded in said additional information list, means for generating an encryption key in the case where said data can be encrypted, means for encrypting said data using said encryption key, means for registering said encryption key in said key management unit, means for receiving an identifier of said registered encryption key from said key management unit, means for generating data by adding said additional information to said information proper, and means for recording said encrypted data and said identification number in said second storage unit using said encryption key.

14. A network system capable of controlling the transmission, comprising:

an information processing system including a first storage unit, a second storage unit for reading/writing data from and into removable media, means for accessing said first and second storage units, and an additional information list containing the additional information to be added to each of said information proper; and

a key management unit for managing an encryption key;

wherein said access means includes means for recording the data from said second storage unit into said first storage unit;

said data includes an identifier and encrypted data;

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said encrypted data includes an additional information section;

said recording means includes means for transmitting said identifier to said key management unit and receiving the encryption key for the corresponding one of said encrypted data, means for decrypting said encrypted data using said encryption key, and means for adding said additional information to said additional information list; and

said key management unit includes means for receiving said identifier from said recording means and transmitting the encryption key associated with said encrypted data to said recording means.

15. A network system capable of controlling the transmission, comprising:

an information processing system including a first storage unit, a second storage unit for reading/writing data from and into removable media, and means for accessing said first and second storage units; and

a key management unit for managing an encryption key;

wherein said access means includes means for recording the data from said first storage unit into said second storage unit;

said data includes information proper and additional information associated with said information proper;

said recording means includes means for

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determining whether said data is to be encrypted or not, based on said additional information, means for generating an encryption key, means for encrypting said data using said encryption key, means for registering said encryption key in said key management unit, means for receiving the identifier of said registered encryption key from said key management unit, and means for recording said encrypted data and said identifier into said second storage unit; and

said key management unit includes means for receiving said encryption key from said recording means and transmitting said identifier associated with said encryption key to said recording means.

16. A network system capable of controlling the transmission, comprising:

an information processing system including a first storage unit, a second storage unit for reading/writing data from and into removable media, and means for accessing said first and second storage units; and

a key management unit for managing an encryption key;

wherein said access means includes means for recording the data from said second storage unit into said first storage unit;

said data include an identifier and encrypted data;

said recording means includes means for transmitting said identifier to said key management



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unit and receiving the encryption key for said encrypted data, and means for decrypting said encrypted data using said encryption key; and

said key management unit includes means for receiving said identifier from said recording means and transmitting said encryption key associated with said encrypted data to said recording means.

17. A network system capable of controlling the transmission according to claim 4,

wherein said transmission/receiving terminal includes means for changing said additional information; and

said change means determines whether the security level of said data can be changed, with reference to the security level of the data of said additional information, the settlor information of said security level, the hierarchical information of said settlor, the changer information of a person intending to change the additional information of said data and the hierarchical information of said changer.